

# Environmental Health Activities in Kansas



### NCEH in Partnership with Kansas

The National Center for Environmental Health (NCEH) is part of the Centers for Disease Control and Prevention (CDC). NCEH's work focuses on three program areas: identifying environmental hazards, measuring exposure to environmental chemicals, and preventing health effects that result from environmental hazards. NCEH has approximately 450 employees and a budget for 2004 of approximately \$189 million; its mission is to promote health and quality of life by preventing or controlling diseases and deaths that result from interactions between people and their environment.

NCEH and partners in **Kansas** collaborate on a variety of environmental health projects throughout the state. In **fiscal years 2000–2004**, NCEH awarded more than **\$2.6** million in direct funds and services to Kansas for various projects. These projects include activities related to investigating an outbreak of itchy rashes, expanding chemical laboratory capacity, and preventing childhood lead poisoning. In addition, Kansas benefits from national-level prevention and response activities conducted by NCEH or NCEH-funded partners.

#### **Identifying Environmental Hazards**

NCEH identifies, investigates, and tracks environmental hazards and their effects on people's health. Following is an example of such activities that NCEH conducted or supported in **Kansas**.

Investigation of a Large Outbreak of Pruritic (Itchy) Rashes—In August 2004, the Kansas Department of Health and Environment received reports of more than 300 people in southeast Kansas seeking medical care for pruritic rashes. At the department's request, NCEH helped investigate the cause of the rashes. Data collection, which included active clinical case finding and a community survey, is complete and the data are being analyzed.

## Measuring Exposure to Environmental Chemicals

NCEH measures environmental chemicals in people to determine how to protect people and improve their health. Following are In fiscal years 2000–2004, NCEH awarded more than \$2.6 million in direct funds and services to Kansas.

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#### **Funding**

■ Antiterrorism Funding to Increase State
Chemical Laboratory Capacity—In fiscal
year 2004, CDC provided more than \$605,000
to Kansas to help expand chemical laboratory
capacity to prepare for and respond to chemical
terrorism incidents and other chemical
emergencies. This expansion will allow full
participation of chemical-terrorism response
laboratories in the Laboratory Response
Network.

#### **Studies**

**Effect of Environmental Exposures on** Fertility-related Outcomes in People—NCEH is partnering with the Division of Reproductive Endocrinology at the Kansas University School of Medicine-Wichita (KUSM-W) to correlate exposure to environmental chemicals with fertility health outcomes for men and women, KUSM-W will interview men and women attending an in-vitro fertilization clinic to determine their levels of environmental and occupational chemical exposures. Study participants will donate samples of blood, semen, ovarian fluid, and extra-abdominal fat. The NCEH laboratory will analyze the specimens for levels of polybrominated diphenyl ethers, polychlorinated biphenyls, and persistent pesticides. The study is pending institutional review board approval.

#### **Services**

- Respond to Chemical Terrorism—NCEH is working with the public health laboratory in Kansas to prepare state laboratory scientists to measure chemical-terrorism agents or their metabolites in people's blood or urine. NCEH is transferring analytic methods for measuring chemical-terrorism agents (including cyanide-based compounds and other chemicals) to Kansas. In addition, NCEH instituted a proficiency-testing program to measure the comparability of the state's analytic results with results from the NCEH laboratory.
- Program—NCEH provides proficiency-testing services and dried-blood-spot, quality-control materials to monitor and help assure the quality of screening program operations for newborns in Kansas. The importance of accurate screening tests for genetic metabolic diseases cannot be overestimated. Testing of blood spots collected from newborns is mandated by law in almost every state to promote early intervention that can prevent mental retardation, severe illness, and premature death.

### Preventing Health Effects That Result from Environmental Hazards

NCEH promotes safe environmental public health practices to minimize exposure to environmental hazards and prevent adverse health effects. Following is an example of such activities that NCEH conducted or supported in Kansas.

Childhood Lead Poisoning Prevention Program—The Kansas Childhood Lead Poisoning Prevention Program (KS CLPPP) has received NCEH funding since 2000. In 2001, the program screened 10,706 children for lead poisoning; 320 children under 6 years of age had elevated blood lead levels.

KS CLPPP is using NCEH funds to develop and implement a childhood lead poisoning elimination plan, a targeted screening plan, and a targeted case management plan. KS CLPPP also is using NCEH funds to maintain and enhance its statewide surveillance system, to increase primary prevention activities and strategic partnerships, and to develop protective policy.

#### Resources

NCEH develops materials that public health professionals, medical-care providers, emergency responders, decision makers, and the public can use to identify and track environmental hazards that threaten human health and to prevent or mitigate exposure to those hazards. NCEH's resources cover a range of environmental public health issues. These issues include air pollution and respiratory health (e.g., asthma, carbon monoxide poisoning, and mold exposures), biomonitoring to determine whether selected chemicals in the environment get into people and to what degree. childhood lead poisoning, emergency preparedness for and response to chemicals and radiation. environmental health services, environmental public health tracking, international emergency and refugee health, laboratory sciences as applied to environmental health, radiation studies, safe disposal of chemical weapons, specific health studies, vessel sanitation, and veterans' health.

For more information about NCEH programs, activities, and publications as well as other resources, contact the NCEH Health Line toll-free at 1-888-232-6789, e-mail NCEHinfo@cdc.gov, or visit the NCEH Web site at www.cdc.gov/nceh.